IN THE ABSTRACT

Please rewrite the Abstract on a separate page as follows.

ABSTRACT

A metal flow device, for high pressure die casting of alloys using a method or machine having, or operable to provide, a pressurised source of molten alloy and a mould defining at least one die cavity, defines a metal flow path by which alloy received from the pressurised source is able to flow into the die cavity. A first part of the length of the flow path includes or comprises a runner, while a second part of the length of the flow path from an outlet end of the runner includes a flow-path exit module (FEM). The FEM has a form which controls the alloy flow whereby the alloy flow velocity decreases progressively from the level at the outlet end of the runner whereby, at a location at which the flow path communicates with the die cavity, the alloy flow velocity is at a level significantly below the level at the outlet end of the runner and such that, on filling of the die cavity, the alloy is able to undergo solidification in the die cavity and back along the flow path towards the runner.

A metal flow device, for high pressure die casting of alloys using a method or machine having, or operable to provide, a pressurised source of molten alloy and a mould defining at least one die cavity, defines a metal flow path by which alloy received from the pressurised source is able to flow into the die cavity. A first part of the length of the flow path includes or comprises a runner; while a second part of the length of the flow path from an outlet end of the runner includes a flow-path exit module (FEM). The FEM has a form which controls the alloy flow whereby the alloy flow velocity decreases progressively from the level at the outlet end of the runner whereby, at a location at which the flow path communicates with the die cavity, the alloy flow velocity is at a level significantly below the level at the

outlet end of the runner and such that, on filling of the die cavity, the alloy is able to undergo solidification in the die cavity and back along the flow path towards the runner.

A metal flow device, for high pressure die casting of alloys using a pressurised source of molten alloy and a mould defining a die cavity, has a metal flow path by which alloy from the source is able to flow into the die cavity. A first part of the flow path includes a runner. A second part of the flow path from an outlet end of the runner includes a flow-path exit module (FEM). The FEM form controls the alloy flow whereby the alloy flow velocity decreases progressively from the outlet end of the runner whereby, at the die cavity, the alloy flow velocity is at a level significantly below the level at the outlet end of the runner and, on filling of the die cavity, molten alloy is able to undergo solidification in the die cavity and back along the flow path.